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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,702	03/09/2004	Johann F. Petersen	58999US003	2885
32692 7590 08/08/2007 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
			EXAMINER WOLLSCHLAGER, JEFFREY MICHAEL	
			ART UNIT 1732	PAPER NUMBER
			NOTIFICATION DATE 08/08/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com
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Office Action Summary

Application No.

10/796,702

Applicant(s)

PETERSEN ET AL.

Examiner

Jeff Wollschlager

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 28-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

It is noted for the record that Examiner Wollschlager has assumed responsibility for this application from Examiner Eashoo.

Response to Amendment

Applicant's amendment to the claims filed April 25, 2007 has been entered. Claims 1, 2, 9, 20, 24, and 25 are currently amended. Claim 4 has been canceled. Claims 28-33 have been withdrawn from further consideration.

Claim Objections

Claims 1-27 are objected to because of the following informalities: The units for basis weight are provided as "g m²" in the claims. The term is properly rendered and understood to be "g/m²". The density of fastener elements is provided throughout the claims in units of "cm²". The density is understood to be in terms of "male fastener members per cm²" or some other proper representation showing the density in terms of number of fastener elements per cm². Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16, 17, 19 and 20-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 16, the abbreviations "CD" and "MD" lack antecedent basis in the claims. Appropriate correction is required. The terms are interpreted to be abbreviations for "cross-direction" and "machine-direction".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 3-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015) and further in view of any of Wood et al. (US 6,668,435) or Itou et al. (US 6,955,847) or Kronzer (US 5,616,155).

Buzzell et al. teaches the basic claimed process of forming a fastening web laminate, comprising: providing a fibrous web layer (Figs. 13 and 13a) for employment as the loop member in a hook and loop fastener (col. 14, line 60 – col. 15, line 27); passing the fibrous web layer through a roll nip formed by a mold roll and a backing roll (Fig. 13); introducing molten resin to the roll nip (Fig. 13); allowing the molten resin to partially solidify and then stripping a precursor laminate from the mold roll (Fig. 13); and stretching the precursor laminate (Figs. 1-2; Abstract) to the extent desired for the intended application (Abstract; col. 10, line 50-67).

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Buzzell et al. further teaches applying a thermal energy prior to stretching (Figs. 1-2). Kennedy et al., which is incorporated by reference into Buzzell et al. (15:1-20), teaches a nonwoven fabric (5:45-60); a draw ratio of 2-8 (7:55-8:40); stretching in a tenter apparatus (Figs. 1-2).

Buzzell et al. further teaches fastener element having densities in the range of 200-2000 per sq. inch and optimizing the density depending upon the desired final use of the fastener (8:40-65); J-shaped fastener heads (Fig. 5); longitudinal stretching using driven rods (4:50-60); various thermoplastic materials such as PET, polypropylene, nylon, and other copolymers (2:40-55 and 9:65-10:50). Buzzell et al. also teaches that the materials are chosen, in part, based upon their physical properties (4:65-5:50).

Buzzell et al. does not teach all the specific physical properties or dimensions of the laminate or nonwoven web. However, each of Wood et al. (Abstract; col. 3, lines 25-62), Itou et al. (Abstract; col. 1, lines 13-65; col. 4, lines 61-col. 5, line 5) and Kronzer (col. 2, line 51-col. 3, line 6) individually disclose fibrous webs within the claimed range and teach optimizing the basis weight of fibrous webs in hook and loop fastener system as desired for the intended application. Furthermore, a person of ordinary skill in the art would have found it obvious to have optimized product properties and dimensions, using routine experimentation as suggested by Buzzell et al. and in view of the combination as a whole in order to form a desired commercially viable product having desired physical traits.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed a fibrous web as claimed while practicing the method of Buzzell for the purpose as suggested by any of Wood et al., Itou et al. and Kronzer for providing a loop portion of the fastener suitable for its intended application (e.g. heavy or light duty) and to reduce "fluffing" by repeated fastening and peeling operations while

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considering production costs (Itou et al: col. 4, line 61-col. 5, line 5) to achieve a stretched product of a desired basis weight suitable for its intended application.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642), when taken with Kennedy et al. (US Pat. 5,260,015), in view of any of Wood et al. (US 6,668,435) or Itou et al. (US 6,955,847) or Kronzer (US 5,616,155), as applied to claims 1 and 3-26 above, and further in view of de Navas Albareda (US Pat. 4,056,593).

Buzzell et al. teach the basic claimed process as set forth above. Buzzell et al. does not teach cutting the precursor laminate in the CD. However, de Navas Albareda teaches cutting a precursor fastener web in the CD (Figs. 1 and 3).

At the time of invention a person of ordinary skill in the art would have found it obvious to have cut a the precursor web in the CD, as taught by de Navas Albareda, in the process of Buzzell et al., because de Navas Albareda suggest that such cutting (and extruding of rib structures) is an equivalent and alternative means for forming fastener products[

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642), when taken with Kennedy et al. (US Pat. 5,260,015), in view of any of Wood et al. (US 6,668,435) or Itou et al. (US 6,955,847) or Kronzer (US 5,616,155) and in view of de Navas Albareda (US Pat. 4,056,593).

Buzzell et al. teaches the basic claimed process of forming a fastening web laminate, comprising: providing a fibrous web layer (Figs. 13 and 13a); passing the fibrous web layer through a roll nip formed by a mold roll and a backing roll (Fig. 13); introducing molten resin to

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the roll nip (Fig. 13); allowing the molten resin to partially solidify and then stripping a precursor laminate from the mold roll (Fig. 13); and stretching the precursor laminate (Figs. 1-2). Buzzell et al. further teaches: applying a thermal energy prior to stretching (Figs. 1-2); Kennedy et al., which is incorporated by reference into Buzzell et al. (15:1-20), teaches a nonwoven fabric (5:45-60); a draw ratio of 2-8 (7:55-8:40); stretching in a tenter apparatus (Figs. 1-2);

Buzzell et al. does not teaches slitting/cutting the precursor laminate in the CD. However, de Navas Albareda teaches cutting a precursor fastener web in the CD (Figs. 1 and 3). At the time of invention a person of ordinary skill in the art would have found it obvious to have cut a the precursor web in the CD, as taught by de Navas Albareda, in the process of Buzzell et al., because de Navas Albareda suggest that such cutting (and extruding of rib structures) is an equivalent and alternative means for forming fastener products.

Buzzell et al. does not teach all the specific physical properties or dimensions of the laminate or nonwoven web. However, each of Wood et al. (Abstract; col. 3, lines 25-62), Itou et al. (Abstract; col. 1, lines 13-65; col. 4, lines 61-col. 5, line 5) and Kronzer (col. 2, line 51-col. 3, line 6) individually disclose fibrous webs within the claimed range and teach optimizing the basis weight of fibrous webs in hook and loop fastener system as desired for the intended application. Furthermore, a person of ordinary skill in the art would have found it obvious to have optimized product properties and dimensions, using routine experimentation as suggested by Buzzell et al. and in view of the combination as a whole in order to form a desired commercially viable product having desired physical traits.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed a fibrous web as claimed while practicing

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the method of Buzzell for the purpose as suggested by any of Wood et al., Itou et al. and Kronzer for providing a loop portion of the fastener suitable for its intended application (e.g. heavy or light duty) and to reduce "fluffing" by repeated fastening and peeling operations while considering production costs (Itou et al: col. 4, line 61-col. 5, line 5) to achieve a stretched product of a desired basis weight suitable for its intended application.

Response to Arguments

Applicant's arguments filed April 25, 2007 have been considered but are moot in view of the new ground(s) of rejection. It appears that Examiner Eashoo inadvertently disregarded claim 4 in the prior office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

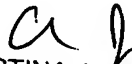
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JW

Jeff Wollschlager
Examiner
Art Unit 1732

July 23, 2007


CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER
8/4/07